

Remarks

We have amended the Cross Reference to Related Applications section to correct a minor typographical error in the previously submitted Amendment.

We have amended the claims 1 and 10 to specify that the continuous or substantially continuous flow of the gaseous composition is at ambient temperature (support found on page 37, lines 9-13 of the specification). Claims 5 and 14 have been amended to specify that the air is not heated above ambient conditions (support found on page 37, lines 11-12 of the specification) in order to avoid confusion with respect to the definition of “ambient air” found in the specification on page 5, lines 10-13 (which includes air that has been heated within the definition of “ambient air”).


Turning to the merits of the invention, Applicants have discovered and claimed a method for accelerating the aging of a catalyst material comprising manganese or an oxide of manganese (sometimes referred to herein as “Mn/MnO_x”). Importantly, the method utilizes a continuous or a substantially-continuous flow of an ambient temperature gaseous composition to achieve a surprisingly accelerated deactivation of the manganese/manganese oxide on a flow volume basis (see page 35, lines 5-8 of the specification).

We respectfully submit that the cited reference U.S. Patent No. 4,780,445 to Jung (“Jung”) fails to teach or suggest the presently claimed invention, specifically, a catalyst aging method that requires the continuous flow of an ambient temperature gaseous composition over a catalyst material comprising manganese or an oxide of manganese. Each of Jung’s aging methods requires a flow of gases heated to 400°C, well above the ambient temperature required in the present claims (see column 3, lines 52-55; column 4, lines 21-23, 34-36 and 58-60; column 5, lines 3-6). Jung neither teaches nor suggests that ambient temperature gases may be used for effective manganese-containing catalyst aging when applied in a continuous or substantially continuous flow, as discovered and claimed by the Applicants (see, e.g., page 37, lines 9-13 of the specification).

In light of the foregoing, we respectfully submit that the pending claims, as amended, clearly define a novel and non-obvious invention that fully merits patent protection. We therefore respectfully request that the application be allowed in its entirety at an early date. If there remain any issues that the Examiner believes may be resolved by discussion, we cordially invite the Examiner to contact Applicant's undersigned representative by telephone at any convenient time.

This Amendment is being filed after five months but within six months of the February 20, 2004 mailing date of the Office action. Authorization to charge the fee required for a three-month extension for response, as well as any other fee deemed to be required, to deposit Account No. 05-1070 is hereby granted.

Respectfully submitted,


Russell G. Lindenfeldar
Reg. No. 39,750

ENGELHARD CORPORATION
101 Wood Avenue
PO Box 770
Iselin, NJ 08830
Tel. 732-205-7125